



Recommendations for Initiation of Warfarin Therapy

If a patient has an acute clot, heparin or low molecular weight heparin (LMWH) is typically begun. The same day or the next day, the patient should also be started on Warfarin therapy. The heparin or LMWH should be overlapped with the Warfarin for 4 – 5 days. Once the INR is in range on two consecutive days, the heparin or LMWH can be discontinued.

Steady-state INR responses take an average of 2 weeks to achieve due to warfarin's long half-life, time required for functional clotting factors to decline to low levels, and time required to empirically establish the correct daily dose. The mean steady-state dose is 4 – 5 mg and range from 0.5 – 50 mg daily; no information reliably predicts the dose necessary to achieve a given INR. Administration of a loading dose offers no advantage. The initial dose can be thought of as a test dose that can help identify patients who are particularly sensitive to the drug. Obtaining an INR 15-24 hours after the first warfarin dose can help determine the second dose. A nomogram for initiating therapy with warfarin is presented in the following table. In the hospital, monitoring of the INR is usually performed daily until in the therapeutic range for at least 2 consecutive days. If warfarin is started as an outpatient, the INR is usually checked 2 – 3 times weekly for the first 1 – 2 weeks. If the response remains stable, the frequency of testing may gradually be prolonged to as often as every 4 weeks.

Recommendations for Initiation of Warfarin Therapy Continued

Day of Therapy	INR	Warfarin Dosage Adjustment Examples
1	Normal	2.5 mg (if elderly, malnourished, liver disease, high bleeding risk, CHF exacerbation, or interacting drugs) 5 mg (should result in INR of 2 within 4-5 days)
2	< 1.5	5 mg
	1.5 – 1.9	2.5 mg
	2 – 2.5 > 2.5	1 – 2.5 mg Omit dose
3	< 1.5	5 – 7.5 mg
	1.5 – 1.9	2.5 – 5 mg
	2 – 3 > 3	0 – 2.5 mg Omit dose
4	< 1.5	10 mg
	1.5 – 1.9	5 – 7.5 mg
	2 – 3 > 3	0 – 5 mg Omit dose
5	< 1.5	10 mg
	1.5 – 1.9	7.5 – 10 mg
	2 – 3 > 3	0 – 5 mg Omit dose
6	< 1.5	7.5 – 12.5 mg
	1.5 – 1.9	5 – 10 mg
	2 – 3	0 – 7.5 mg
	> 3	Omit dose

References:

- American College of Chest Physicians. Sixth ACCP Consensus Conference on Antithrombotic Therapy. CHEST 2001;119(1):suppl.
 Harrison L, et al. Comparison of 5 mg and 10 mg Loading Doses on Initiation of Warfarin Therapy. Ann Intern Med. 1997;126:133-136.
 Crowther M, et al. Warfarin: Less May Be Better. Ann Intern Med. 1997;127:332-333.